BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Subsidiary Diploma in Information Technology Pearson BTEC International Level 3 Foundation Diploma in Information Technology Pearson BTEC International Level 3 Diploma in Information Technology Pearson BTEC International Level 3 National Extended Diploma in Information Technology
Unit number and title	**Unit 2: Creating Systems to Manage Information**
Learning aim(s)	**B:** Design a relational database to meet client requirements **C:** Develop a relational database to meet client requirements
Assignment title	**Managing Information at the Wildlife Park**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You have been asked to create a relational database for Go Wild Wildlife Park. The database will store records on animals and their keepers. The park looks after animals from across the world. The park is based in Wollombi, New South Wales, Australia. The data provided in the data file is presented in one large table. This table is inefficient because it has repeated data. You will split up this large table into smaller connected tables. You will need to create five linked tables that record the: • animals in the park - animal ID, name, gender and the year they arrived at the park. This table must also include the primary keys from the other tables. • animals' species - species ID, species type, species group, lifestyle and conservation status • animals' diet - diet ID, diet type and the number of feeds per day • keepers - keepers ID, name, date of birth and rank • enclosures - enclosure ID, type and location The park employs several keepers, ranging in rank; senior, standard and junior. Each animal is assigned to one keeper who has several animals in their care. The park uses a variety of enclosures each housing several animals. The enclosures are categorised by their type. For example, an enclosure can be a moat. Each animal is assigned a single enclosure.

	Each animal is fed a specific diet a set number of times a day.

Task 1	The owner of the wildlife park has accept your report and would now like you to proceed in creating the database. Create a data dictionary and entity relationship diagram (ERD) for the database given in the set assignment information. The database structure must: • accept the data provided • avoid unnecessary duplication • use recognised naming conventions • ensure data integrity. The data dictionary must demonstrate appropriate validation which may include: • presence checks • length checks • value lookups • table lookups • range checks • format checks Comment on your designs to evaluate how your decisions meet the purpose of the database
Checklist of evidence required	A database dictionary Comments on the design of the structure to meet the purpose of the database.

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
2/B.D2	Evaluate the design against client requirements.
2BA.M2	Justify design decisions made, showing how the design will fulfil its purpose and client requirements.
2/B.P2	Produce designs for a relational database that meets client requirements.

Sources of information to support you with this Assignment	
Other assessment materials attached to this Assignment Brief	A CSV file containing data about the wildlife park should be used with this assignment brief.

Task 2	Use your **data dictionary** and **ERD** to help you create the relational database structure. **Task B** The owner of the park wants you to create data entry forms

	to register details for the: • animals in the park • animals' species • animals' diet • keepers • enclosures. The forms must include features to ensure validity and integrity of data, and include at least one automated feature.
Checklist of evidence required	A written report
Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
2/C.M5	Implement an automated function
2/C.P3	Create and populate a relational database to meet client requirements.
2/C.P4	Create features in data entry forms to ensure validity and integrity of data.
Sources of information to support you with this Assignment	
Other assessment materials attached to this Assignment Brief	A CSV file containing data about the wildlife park should be used with this assignment brief.

Task 3	Import the data from file the **CSV file** into your database structure. You have been asked to use the database to create some queries. For each one, show the design view and datasheet view and take a screenshot of: • a query to display an alphabetical sorted list of keepers, showing ID, name and rank • a query to calculate the number of animals in each type of enclosure • a query that would allow a user to enter the name of a keeper's rank as a parameter; for each rank, display the keeper's name and their date of birth • a query to calculate the total for each species which has more than three feeds in a day • a query to display the omnivores who are critically endangered showing the animal ID, the date they arrived in the park, the species ID and the keeper ID.
Checklist of evidence required	A written report
Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:

2/C.M3	Import data from an external source.
2/C.M4	Use advanced features and functions to manipulate data within the database.
2/C.P3	Create and populate a relational database to meet client requirements.
2/C.P5	Perform queries using multiple tables and multiple criteria.
2/C.P6	Use database features and functions to manipulate data within the database.
Sources of information to support you with this Assignment	
Other assessment materials attached to this Assignment Brief	A CSV file containing data about the wildlife park should be used with this assignment brief.

Task 4	You must create a database report that: • displays the animals who are supervised by Dave and those who are supervised by Temi • group by keeper, displaying animal details calculate and display the number of animals per keeper and the overall number of animals.
Checklist of evidence required	A written report
Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
2/C.M4	Use advanced features and functions to manipulate data within the database.
2/C.P5	Perform queries using multiple tables and multiple criteria.
Sources of information to support you with this Assignment	
Other assessment materials attached to this Assignment Brief	A CSV file containing data about the wildlife park should be used with this assignment brief.

Task 5	Create a test plan to test: • your input forms including calculations, validation and macros/code, using appropriate test data (normal, erroneous and extreme). Complete the test plan to show the expected outcomes, actual outcomes, and comments detailing how errors were fixed.
Checklist of evidence required	

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
2/C.M6	Use testing outcomes to improve and refine the database solution.
2/C.P7	Test the database for correctness, functionality and acceptance.
Sources of information to support you with this Assignment	
Other assessment materials attached to this Assignment Brief	A CSV file containing data about the wildlife park should be used with this assignment brief.

Task 6	Evaluate your database against the given scenario, justifying: • how well your solution meets the requirements of the scenario • the quality, performance and usability of the database • the changes made during the development and testing process
Checklist of evidence required	
Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
2/C.D3	Evaluate the quality of the testing and the refined database solution.
Sources of information to support you with this Assignment	
Other assessment materials attached to this Assignment Brief	A CSV file containing data about the wildlife park should be used with this assignment brief.